Urban Tree Canopy Pre-Assessment
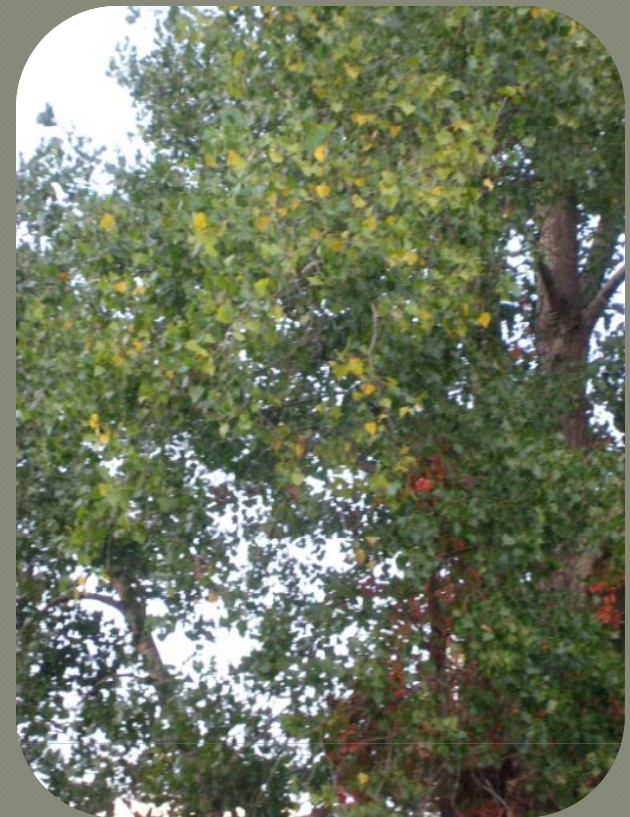
Maia Campbell
Melissa Colletti
Nick Grandt
Mike Mohr
Kelly Schmitt
Kerry Soltis

What is Urban Tree Canopy?

Urban tree canopy (UTC) is the layer of leaves, branches, and stems of trees that cover the ground when viewed from above.

- What are the Benefits of UTC?
  - Reduction of storm water run-off
  - Improved air and water quality
  - Energy savings from lowered urban heat island effect
  - Increased property values
  - Increased wildlife habitat
  - Aesthetic values

Goal and scope

- **Objectives:**
  - Estimate the amount and distribution of canopy cover and impervious surfaces
  - Identify areas where canopy cover or pervious surfaces can be improved upon with recommendations for future planning
  - Provide methodology for future assessments

- **Methods:**
  - High-resolution aerial photographs
  - Ground truthed sample points
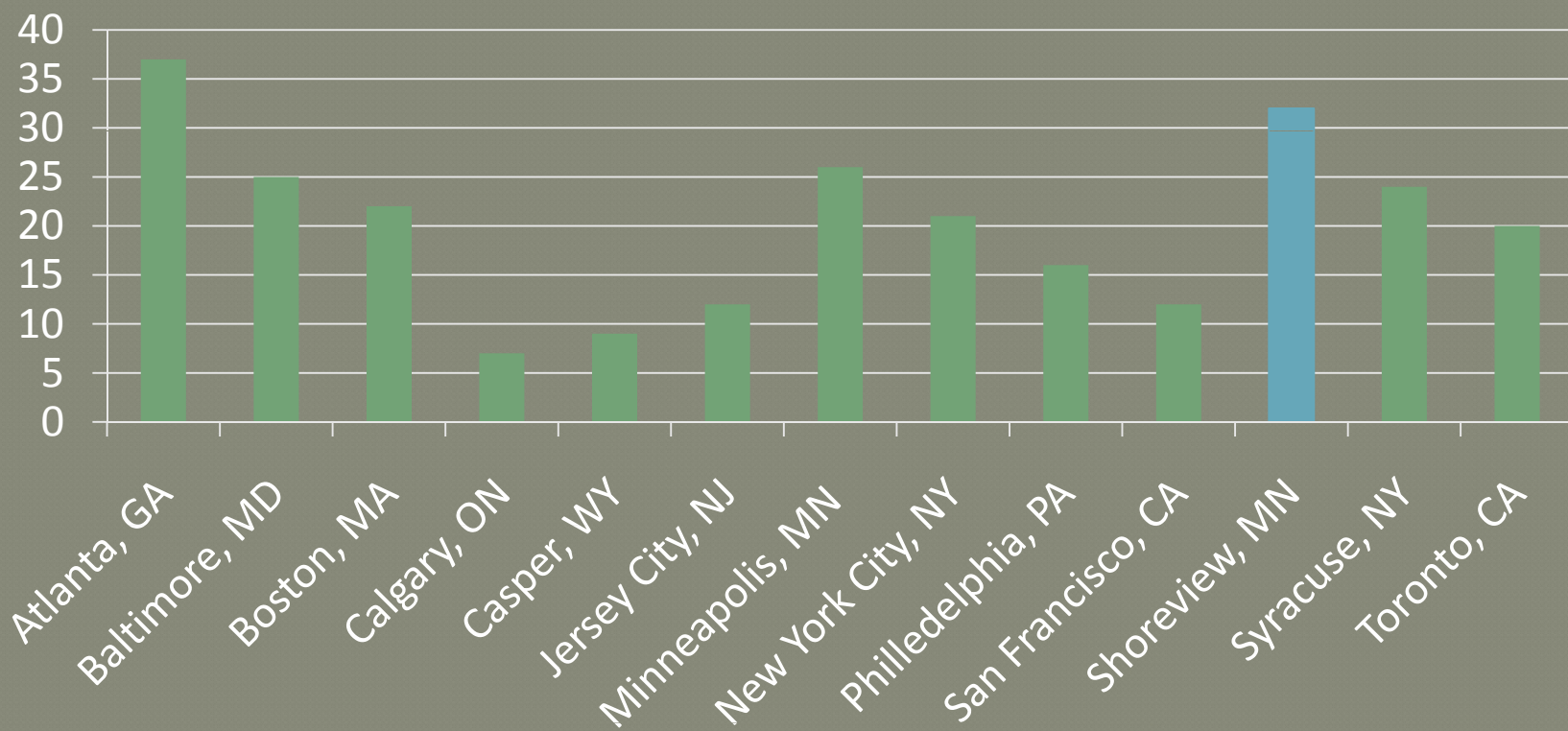 - Compared results to other cities with UTC data.

Type	Shoreview's Values		Recommended Values *
	Canopy Cover (%)	Impervious Surface (%)	Canopy Cover (%)
Residential	51	35	50
Commercial	11	69	15
Parks	21	21	20
Boulevard	30	63	NA
Overall	32	47	40

* Values based on national averages and other city's goals for UTC

- Shoreview is doing well in Residential & Park areas
- Overall Shoreview (32%) is below the national recommended level (40%)
- Ash trees account for approximately 9.5 % of Shoreview's Urban Canopy

Findings

Total canopy cover (%) in metro areas across the United States

* Data taken from published UTC Assessments

1.) Conduct an official assessment and set goals

- ➤ Opportunity to share data on landscape level
- ➤ Identify hot spots where increasing UTC is most beneficial
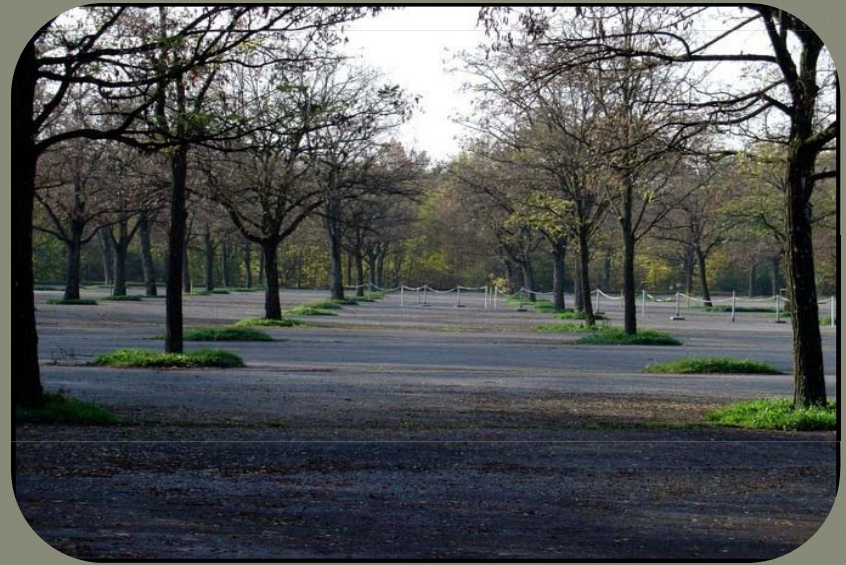- ➤ Enable measurable progress as UTC matures

* Ikonos high resolution false color image

2.) Increase canopy cover throughout the city

➢ Focus on commercial areas and monocultures
- Use well adapted trees (tolerant of stresses)
- Plant vegetation where trees are not suitable

➢ Choose a variety of well adapted species
- Opportunity to diversify Shoreview's current tree inventory

* Parking lot trees in Munich, Germany

3.) Use pervious pavement technologies

- ➢ Low traffic areas
  - Parking lots (commercial and community parks)
  - Alleys (Non-plowed)

* Pervious Pavement Woodbridge neighborhood

In Summary

- Shoreview already contains an impressive urban tree resource which provides current residents with many tangible benefits

- Prudent and proactive planning can protect and further develop this resource, thus providing future residents even greater advantages.

Questions?